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10/563,022	11/21/2006	Roland Edelmann	283357US0PCT	1934
22850	7590	09/10/2010	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314			TOSCANO, ALICIA	
			ART UNIT	PAPER NUMBER
			1796	
			NOTIFICATION DATE	DELIVERY MODE
			09/10/2010	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/563,022	<b>Applicant(s)</b> EDELMANN ET AL.	
	<b>Examiner</b> ALICIA M. TOSCANO	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 8/2/10.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. The prior art discloses a range of 0.5-6 moles water per Si, the claims require a range of 0.001 to < 0.8 moles water per Si. The Examiner mistakenly put forth an anticipation rejection thereon and has changed it below to be a prima facie case of obviousness. As such the action is made non-final.

In the interview dated 7/29/10, the Examiner stated that the discussed ranges in the prior art do not anticipate the range of the newly amended claims. In this interview the Examiner was basing her position on the citations Applicant set forth in the interview. The positions previously set forth (are reiterated below) properly disclose ranges that overlap those of the claims. As such rejections over Mehnert and Edelmann are continued. Applicant has persuasively argued that the Examples of Burger do not disclose the claimed water to Si range, as such Burger is withdrawn. Rejections over Takarada and Hardmann are withdrawn/overcome for reasons discussed below.

### ***Claim Objections***

2. As set forth in the action dated 3/2/10: Claim 16 is objected to because of the following informalities: the term "the liquid" should be changed to "the formulation" or a similar correction to put the claims properly commensurate with each other. Appropriate correction is required.

***Priority***

3. Should applicant desire to obtain the benefit of foreign priority under 35 U.S.C. 119(a)-(d), a certified English translation of the foreign application must be submitted in reply to this action. 37 CFR 41.154(b) and 41.202(e).

Failure to provide a certified translation may result in no benefit being accorded for the non-English application.

4. Rejections over Mehnert (US 6830816, US 2003/0008974), and Edelmann (US 6699586, US 20020197457) set forth below currently fall under 102(b). When translation of the foreign priority is received these rejections will fall under 102(a) and 102(e).

***Claim Rejections - 35 USC § 102***

5. Rejection over Claims 1-14, 16-23 under 35 U.S.C. 102(b) as being anticipated by Mehnert (US 2003/0008974, equivalent to US 6830816) is withdrawn, a 103 based rejection is newly put forth below for reasons set forth above.

6. Rejection over Claims 1-23 under 35 U.S.C. 102(b) as being anticipated by Burger (US 2003/0041779 or US 6695904) is withdrawn for reasons set forth above.

7. Rejection over Claims 1-23 under 35 U.S.C. 102(b) as being anticipated by Edelmann (US 20020197457 or US 6699586) is withdrawn, a 103 based rejection is newly put forth below for reasons set forth above.

***Claim Rejections - 35 USC § 102 or 103***

8. Rejection over Claims 1-9 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Takarada (US 5021091) is overcome by amendment, Takarada discloses a water to Si ratio of 1.9:1 in the examples which does not meet the requirements of the amended claims.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 1-14, 16-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mehnert (US 2003/0008974, equivalent to US 6830816, written over '974).

Elements of this rejection are as set forth in the action dated 3/2/10 amended below to reflect the claim amendments and to properly address the overlap in the disclosed vs. claimed range. The paste of Mehnert is disclosed to be diluted (Column 5 line 49) to obtain lacquer systems, inherently forming the dispersion of the claims, and the viscosity is preferably 800-1000 mPas (Column 6 line 47), meeting the viscosity requirements of the claims.

Claim 18 of '974 (and claim 21 of '816) discloses a range of 0.5-6 moles water per mole Si component (ii). Si component (ii) only has one Si atom, thusly the range is equivalent to 0.5-6 moles water per mole Si atom. As such a prima facie case of

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obviousness exists over the claimed range. In the case where the claimed ranges “overlap or lie inside ranges disclosed by the prior art” a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).

Claim 1, Column 9 line 18, Column 6 line 46 and of '974 further meet the composition requirements of instant claims 1, 4, 5, 7, 8 and 9. Column 10 line 47 of '974 further meets the requirements of instant claims 2 and 3, claim 12 of '974 meets the requirements of instant claim 6, elements above meet the requirements of claims 11-14, The Examples of '816 further meet the process requirements of claims 16-18 and elements of claims 20-22 are met by elements set forth above.

10. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edelmann (US 20020197457 or US 6699586).

Elements of this rejection are as set forth in the action dated 3/2/10 amended below to reflect the claim amendments and to properly address the overlap in the disclosed vs. claimed range. The coating composition of Edelman is disclosed to have a low viscosity of from 500-1000 mPas (Column 10 line 14), since the particles are dispersed in the overall coating matrix the liquid dispersion requirements are deemed met, as further required by amended claim 1.

Claims 4, 8 and 11 of '586 meet elements of instant claims 1, 4, 5, 8, claim 18 of '586 discloses the use of 0.5-6 mol of water per mole Si, as such a prima facie case of

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obviousness exists over the water to Si ratio of the independent claims. In the case where the claimed ranges “overlap or lie inside ranges disclosed by the prior art” a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).

As such all elements of claims 1, 4, 5 and 8 are met, elements of claim 9 are deemed inherent since the composition requirements are met, claim 14 of '586 meets the requirements of instant claim 2, claim 13 of '586 meets the requirements of instant claim 3, claim 2 of '586 meets the requirements of instant claims 6 and 7, claims 11-14 and 20-23 are met by elements set forth above, Column 11 line 52 meets the requirements of instant claims 15 and 19, Ex 1 further meets the limitations of claims 16-18.

11. Rejection over Claims 10-13, 14-23 under 35 U.S.C. 103(a) as being unpatentable over Takarada in view of Hardman (US 4329273) is overcome by Applicant's arguments. Takarada discloses a water to Si ratio of 2.1:1.11, see Applicant's calculations on page 12 of the remarks date' 8/2/10. Hardman does not overlap the teachings of Takarada thusly combination of the references is found to be improper and the rejection is removed.

12. Claims 15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mehnert (US 20030008974 or US 6830816) in view of Hardman (US 4329273).

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This rejection is as set forth in the action dated 3/2/10, reiterated below in its entirety. See remarks below.

Column 14 line 8 and Examples of '974 discloses the acids of claims 15, however the ppm of the acids is not disclosed.

'273 includes elements as set forth above and discloses the known use of 10-500 ppm acid in a similar hydrolysis reaction. A prima facie case of obviousness exists to use that taught by '273 since it is known to be suitable for the intended use. See *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945), wherein the selection of a known material based on its suitability for its intended use supported a prima facie obviousness determination. As such the limitations of claim 15 are deemed met and since the amount of acid is met the pH is deemed inherent, as required by claim 19.

Remarks:

Applicant argues the composition of Mehnert is a paste and Hardman is an elastic silicone rubber. Applicant argues Hardman discloses hydrolysis of only a curing component and combination is thusly improper. Applicant argues the water to Si ratio is not met by Hardman.

The Examiner disagrees. The Examiner is not relying on Hardman for the water to Si ratio herein, Applicant's arguments seem misplaced. Since the amount of acid disclosed in Hardman is used for a similar purpose as that of Mehnert a proper case of

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obviousness has been put forth. That Mehnert is a paste and Hardman is a rubber is found moot since the acid will functionalize the same in both applications. As such Applicant's arguments are not persuasive and the rejection stands as set forth above.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. Claims 1-23 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 12, 21 of U.S. Patent No. 6830816 in view of US 4329273. Claim 1 and Column 9 line 18, Column 6 line 46 and claim 21 of '816 meet the composition requirements of instant claims 1, 4, 5, 7, 8 and 9. Those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in the application defines an obvious variation of an invention claimed in the patent. *In re*

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Vogel, 422 F.2d 438, 441-42, 164 USPQ 619, 622 (CCPA 1970). Column 10 line 47 of '816 further meets the requirements of instant claims 2 and 3, claim 12 of '816 meets the requirements of instant claim 6, claim 21 of '816 meets the requirements of instant claims 10-14, Column 14 line 8 and Examples discloses the acids of claims 15, however the ppm of the acids is not disclosed.

'273 includes elements as set forth above and discloses the known use of 10-500 ppm acid in a similar hydrolysis reaction. A prima facie case of obviousness exists to use that taught by '273 since it is known to be suitable for the intended use. See *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945), wherein the selection of a known material based on its suitability for its intended use supported a prima facie obviousness determination. As such the limitations of claim 15 are deemed met and since the amount of acid is met the pH is deemed inherent, as required by claim 19. The Examples of '816 further meet the process requirements of claims 16-18 and elements of claims 20-23 are met by elements set forth above.

14. Rejection over Claims 1-23 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 8, 9, 13, 14 of U.S. Patent No. 6695904 is overcome for reasons set forth in Burger above.

15. Claims 1-23 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 4, 8, 11, 14, 13, 2, 18 of U.S. Patent No. 6699586. Although the conflicting claims are not identical, they are not patentably

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distinct from each other because Claims 4, 8 and 11, 18 of '586 meet the requirements of instant claims 1, 4, 5, 8, elements of claim 9 are deemed inherent since the composition requirements are met, claim 14 of '586 meets the requirements of instant claim 2, claim 13 of '586 meets the requirements of instant claim 3, claim 2 of '586 meets the requirements of instant claims 6 and 7, claim 18 of '586 meets the requirements of instant claim 10, claims 11-14 and 20-23 are met by elements set forth above, Column 11 line 52 meets the requirements of instant claims 15 and 19, Ex 1 further meets the limitations of claims 16-18. Those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in the application defines an obvious variation of an invention claimed in the patent. In re Vogel, 422 F.2d 438, 441-42, 164 USPQ 619, 622 (CCPA 1970).

16. Claims 1-23 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 26, 33, 27, 53, 34, 53 of copending Application No. 11258025. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 26, page 9 line 30, page 18 line 14 and page 18 line 28 of '025 meet the requirements of instant claims 1, 4, 7 and 8, claim 33 of '025 meets the requirements of instant claim 2, page 20 line 21-23 meets the requirements of instant claim 3, claim 27 of '025 meets the requirements of instant claim 6, claim 53 of '025 meets the requirements of instant claim 10, claim 34 of '025 meets the requirements of instant claim 16, Ex 1-3 meet the

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requirements of instant claims 17 and 18, Ex 1 discloses the use of 100ppm acid, as required by instant claims 15 and 19, claims 11-14, 20-23 are met by elements set forth above. Those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in the application defines an obvious variation of an invention claimed in the patent. In re Vogel, 422 F.2d 438, 441-42, 164 USPQ 619, 622 (CCPA 1970).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Toscano whose telephone number is (571)272-2451. The examiner can normally be reached on M-F 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AMT

/RANDY GULAKOWSKI/  
Supervisory Patent Examiner, Art Unit 1796